**Precalculus**

**Notes 9.2**

1. **Arithmetic Sequences:** sequences whose consecutive terms have a common difference.

th term of an arithmetic sequence:

**Ex 1:**

1. Find a formula for the th term of an arithmetic sequence whose common difference is 3 and whose 1st term is 2.
2. Find the th term of 5, 7, 9, 11, 13, …

**Ex. 2:**

* 4th term of arithmetic sequence = 20
* 13th term of arithmetic sequence = 65
* Write the 1st several terms of this sequence

**Ex. 3:** Find the 9th term of the arithmetic sequence that begins with 2 and 9.

1. **The Sum of a finite Arithmetic Sequence**

**Ex. 4:** Find the sum:

1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19 =

**Ex. 5:** Find the sum of integers from 1 to 100.

Do this one with the calculator:

**Ex. 6:** Find the sum of the 1st 150 terms of A.S.: 5, 16, 27, 38, 49, …

1. **Applications:**

Ex. 8: p. 629

Ex. 9: p. 630

Try it with the calculator: